Manuscript ID : 00001-90442

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATIONS AND INFORMATION TECHNOLOGY

Volume 8, Issue 1, January-February 2025, Pages 2977-2988, Page Count - 12

# ACCELERATING GL ACCOUNT NORMALIZATION WITH GENERATIVE AI: A CASE STUDY IN FINANCIAL DATA TRANSFORMATION

Poshan Kumar Reddy Ponnamreddy (1)

<sup>(1)</sup> Sri Venkateswara University, Tirupati, Andhra Pradesh, India.

## Abstract

This article comprehensively analyzes how Generative AI technology transforms financial data consolidation across multiple Enterprise Resource Planning systems. The article examines the evolution from traditional resource-intensive approaches to AI-driven solutions, highlighting significant improvements in processing efficiency, cost reduction, and accuracy. The article explores the technical architecture, including cloud computing integration, advanced language processing, and intelligent data normalization frameworks. Through extensive case studies and empirical evidence, the article demonstrates how AI implementation addresses challenges in multi-language processing, account harmonization, and system integration while maintaining high accuracy rates across various financial operations.

## **Author Keywords**

Generative AI, Financial Data Consolidation, Enterprise Resource Planning, Cloud Computing, Machine Learning.

ISSN Print: 2348-0009 Source Type: Journals Publication Language: English Abbreviated Journal Title: IJRCAIT Publisher Name: IAEME Publication Major Subject: Physical Sciences Subject area: Data Mining ISSN Online: 2347-5099 Document Type: Journal Article DOI: https://doi.org/10.34218/IJRCAIT\_08\_01\_215 Access Type: Open Access Resource Licence: CC BY-NC Subject Area classification: Computer Science Source: SCOPEDATABASE

#### Reference

[1] Mordor Intelligence, "Enterprise Resource Planning Market Size & Share Analysis - Growth Trends & Forecasts (2025-2030)," 2024. [Online]. Available: https://www.mordorintelligence.com/industry-reports/enterprise-resource-planning-market

[2] Salman Bahoo et al., "Artificial intelligence in finance: a comprehensive review through bibliometric and content analysis," SN Business & Economics, Volume 4, article number 23, (2024). Available: https://link.springer.com/article/10.1007/s43546-023-00618-x

[3] Sanjay Vijay Mhaskey, "Integration of Artificial Intelligence (AI) in Enterprise Resource Planning (ERP) Systems: Opportunities, Challenges, and Implications," ResearchGate, December 2024. Available: https://www.researchgate.net/publication/387667312\_Integration\_of\_Artificial\_In telligence\_AI\_in\_Enterprise\_Resource\_Planning\_ERP\_Systems\_Opportunities\_Challenges\_and\_Implications

[4] Muhammad RIfqi Yudi Hidayat et al., "The Impact of Artificial Intelligence (AI) on Financial Management," ResearchGate, January 2024. Available: https://www.researchgate.net/publication/377958203\_The\_Impact\_of\_Artificial\_Intelligence\_AI\_on\_Financial\_Management

[5] Krishna Rao Vemula, "Native Cloud Applications: A Comprehensive Analysis of Advantages, Challenges, and Use Cases in Modern IT



Source ID : 00000707

#### Scope Database Link: https://sdbindex.com/documents/00000707/00001-90442.pdf Article Link: https://iaeme.com/MasterAdmin/Journal\_uploads/IJRCAIT/VOLUME\_8\_ISSUE\_1/IJRCAIT\_08\_01\_215.pdf

Infrastructure," International Journal of Computer Engineering and Technology (IJCET), Volume 16, Issue 1, Jan-Feb 2025, pp. 1253-1264. Available: https://iaeme.com/MasterAdmin/Journal\_uploads/IJCET/VOLUME\_16\_ISSUE\_1/IJCET\_16\_01\_095.pdf

[6] Eben Charles et al., "Natural Language Processing (NLP) for Financial Text Analysis," ResearchGate, November 2024. Available: https://www.researchgate.net/publication/385860012\_Natural\_language\_processing\_nlp\_for\_financial\_text\_analysis

[7] Esmat Almustafa et al., "Implementation of Artificial Intelligence for Financial Process Innovation of Commercial Banks. Revista De Gestão Social E Ambiental, 17(9), e04119. Available: https://rgsa.openaccesspublications.org/rgsa/article/view/4119

[8] Beatrice Adelakun, "AI-Driven Financial Forecasting: Innovations and Implications for Accounting Practices," ResearchGate, December 2023. Available: https://www.researchgate.net/publication/381465681\_AI-DRIVEN\_FINANCIAL\_FORECASTING\_INNOVATIONS\_AND\_IMPLICATIONS\_FOR\_ACCOUNTING\_PRACTICES

[9] Aayush Chavan et al., "A Quantitative Study of Enterprise Resource Planning (ERP) System and its Applications," International Journal For Research in Applied Science and Engineering Technology, 2023-05-21. Available: https://www.ijraset.com/research-paper/a-quantitative-study-of-enterprise-resource-planning-system-and-its-applications

[10] David Ajiga et al., "Review Of AI Techniques in Financial Forecasting: Applications in Stock Market Analysis," ResearchGate, February 2024. Available: https://www.researchgate.net/publication/378297354\_REVIEW\_OF\_AI\_TECHNIQUES\_IN\_FINANCIAL\_FORECASTING\_APPLICATIONS\_IN\_STOCK\_MARKET\_ANALYSIS